

DOCKET THE BODY ORIGINAL

SHAINIS & PELTZMAN

COUNSELORS AT LAW

SUITE 500
1255 23RD STREET, N.W.
WASHINGTON, D.C. 20037

202-857-2946

RECEIVED

MAY 21 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

AARON P. SHAINIS
202-857-2942

LEE J. PELTZMAN
202-857-2943

FACSIMILE
202-857-2900

May 21, 1993

Ms. Donna R. Searcy
Secretary
Federal Communications Commission

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

an antenna HAAT of 100 meters) at its specified site or equivalent from a higher elevation, we question whether the proposal would provide a 70 dBu signal over the entire community, as required by Section 73.315(a).

At paragraph 4 of the Notice of Proposed Rulemaking, the Commission states as follows:

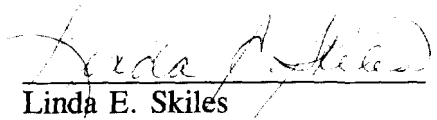
The Commission generally will not make an allotment absent a showing that a site is available which will clear any major intervening obstructions and provide the community with a minimum of signal of 70 dBu. See, e.g., Pinckneyville, Illinois, 41 RR 2d 69, 71 (1977). Therefore, Petitioner is requested to provide additional information in its Comments to demonstrate its ability to comply with the requirements of Section 73.315 of the Commission's Rules. If the Petitioner desires to pursue its specified site, it should also include evidence of FAA clearance for a tower of 256.4 meters (384.0 feet) to accommodate its proposal at that location.

4. Attached to the instant submission is an Engineering Statement. The Engineering

CERTIFICATE OF SERVICE

I, Linda E. Skiles, Office Administrator of the law firm of Shainis & Peltzman, do hereby certify that copies of the foregoing document were mailed this 21st day of May, 1993, to the offices of the following:

Mr. Michael C. Ruger *
Chief, Allocations Branch
Federal Communications Commission
Mass Media Bureau
Room 8322
2025 M Street, N. W.
Washington, D. C. 20554
1800D5


Linda E. Skiles

* Via Hand Delivery

C:\FILES\SHAINIS.PLD\KME0.COS

***KLEIN
BROADCAST
ENGINEERING***

FCC ORIGINAL

dedicated to improving the science and technology of radio & television communications

*ENGINEERING EXHIBITS
IN SUPPORT OF COMMENTS
re: NPRM / RM-8134*

*PREPARED FOR

CIRCLE S BROADCASTING CO.
WICKENBURG , ARIZONA*

APRIL 1993

KLEIN BROADCAST ENGINEERING

dedicated to improving the science and technology of radio & television communications

Before the
Federal Communications Commission
Washington, D.C. 20554

Engineering Exhibits and Statement
In Support of Comments

In the Matter of: Amendment of Section 73.202(b) RM-8134
Table of Allotments
FM Broadcast Stations
(Wickenburg, Arizona)

Circle S Broadcasting Company, Inc.

INTRODUCTION and ENGINEERING STATEMENT

The petitioner, Circle S Broadcasting Company, Inc., licensee of FM Broadcast Station KMEO(FM), formerly KFMA(FM), Wickenburg, Arizona, has retained the firm of Klein Broadcast Engineering to prepare the necessary engineering exhibits in support of the above captioned Rule Making, to the extent to demonstrate the required 70 dBu coverage would exist from the petitioner's proposed site.

In the Notice of Proposed Rule Making (NPRM) released March 31, 1993, the Commission expressed some concern about the required 70 dBu coverage of the principal community of Wickenburg, Arizona and the ability of the petitioner's proposal to provide the principal community with the required coverage from the petitioner's proposed site. The Commission made a determination of the existence of a terrain obstruction between the petitioner's proposed site and the principal community.

This writer agrees with the Commission's initial review of the terrain obstruction problem. In addition the Commission has made several assumptions concerning terrain elevation at the petitioner's proposed site and the required tower height to "clear" the terrain obstruction between the petitioner's proposed site and the principal community. This writer has checked the Commission's terrain calculations and has found them to be accurate and correct.

This firm then went on to study the existing terrain and predicted coverage from a maximum Class C3 facility from the proposed site. We agree with the Commission that the ground elevation at the proposed site is 787 meters AMSL. We used a tower height of 257 meters AGL with an antenna radiation center of 1042 meters AMSL. This tower height was used as it calculated to "clear" the terrain obstruction identified by the Commission and confirmed by this firm.

COMPUTERIZED ENGINEERING REPORTS - ALLOCATION STUDIES

A-1 - FM - AM DIRECTIONALS - AUDIO - STL - SATELLITE COMMUNICATIONS

5019 East Sapphire Lane - Scottsdale, Arizona 85253 - 602-991-0575

KLEIN BROADCAST ENGINEERING

dedicated to improving the science and technology of radio & television communications
INTRODUCTION and ENGINEERING STATEMENT cont'd page two: RM-8134

This yielded a calculated height above average terrain (HAAT) of 316 meters. We then calculated the reduced effective radiated power of a class C3 facility for operation with maximum class C3 facilities at a calculated HAAT of 316 meters to be 2.5 kilowatts E.R.P.

We then ran bearing and distance calculations between the petitioner's proposed site at NL:33 - 51 - 31 / WL:112 - 53 - 04 and the listed geographic coordinates for the principal community of Wickenburg, Arizona, listed in the Commission's database at NL:33 - 58 - 00 / WL:112 - 43 - 48. The distance and bearing calculated to be 18.65 kilometers to Wickenburg, Arizona from the petitioner's proposed site, on a bearing of 49.8 degrees true north. These bearing and distance calculations are included with this engineering statement and listed as Engineering Exhibit E-1.

We then went back to the NGDC 30 second terrain data file and ran an average terrain calculation program to generate the terrain data necessary to determine the HAAT on the FCC required cardinal radials plus the additional radial directly between the petitioner's proposed site and the principal community of Wickenburg, Arizona. We found the HAAT on the 49.8 degree radial to be 225.6 meters. The results of this terrain elevation calculation program are included in this engineering statement and is marked Engineering Exhibit E-2.

We then took this elevation data and calculated the predicted coverage contours for the proposed facility. We found that the predicted 70 dBu contour on the azimuth of 49.8 degrees extended toward the principal community a distance of 19.7 kilometers, approximately 1.2 kilometers further distant than the geographic coordinate distance of 18.65 kilometers for the location of the principal community of Wickenburg, Arizona. Since it is a known fact Wickenburg, Arizona is a very small town and occupies a very small land area, it has been determined that the class C3 facility, as proposed, would comply with Section 73.315 with regard to the required 70 dBu coverage. The predicted coverage contour calculations are included with this engineering statement and are marked Engineering Exhibit E-3.

It is known to this writer that it has been Commission policy when coverage of a minimum of 80% of the required 70 dBu coverage exists over the principal community, the proposal complies with Section 73.315 of the Commission's Rules.

KLEIN BROADCAST ENGINEERING

dedicated to improving the science and technology of radio & television communications
INTRODUCTION and ENGINEERING STATEMENT cont'd page three: RM-8134

In addition we have prepared a map with the predicted 70 dBu coverage contour accurately plotted upon such map. This map is marked Engineering Exhibit E-4 and shows compliance with Section 73.315 of the Commission's Rules. The map used for this exhibit is an aeronautical sectional chart, titled "Phoenix", prepared by NOAA, 44th edition, dated November 15, 1990.

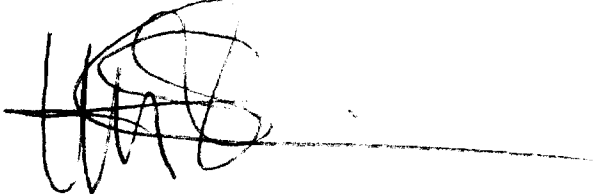
CONCLUSION

We have concluded from the study of the included exhibits that the proposal to upgrade the facilities of FM Broadcast Station KME0(FM), at Wickenburg, Arizona, to a class C3 facility on FM Channel 231 / C3 from the petitioner's proposed site using a tower of 257 height AGL would comply with all requirements of Section 73.207 and 73.315 of the Commission's Rules.

In addition, as requested by the Commission in the recent NPRM, the petitioner has prepared and filed with the Western Pacific Regional Office of the Federal Aviation Administration, in Los Angeles, California, an FAA Form 7460-1, Notice of Proposed Construction, to seek FAA approval for the erection of a tower 257 meters AGL at the petitioner's proposed site. A copy of this filing is included herein and is marked Engineering Exhibit E-5. At this time we see no apparent reason why the FAA would not approve the proposal.

For the preceding reasons, the petitioner, Circle S Broadcasting Company, Inc., licensee of FM Broadcast Station KME0(FM), Wickenburg, Arizona, requests the Commission consider this engineering statement and exhibits and grant the petitioner's requested amendment of the FM Table of Allotments to specify operation of KME0(FM) on FM Channel 231, Class C3, at Wickenburg, Arizona.

Respectfully submitted,



Elliott Kurt Klein,
Consulting Broadcast Engineer

Klein Broadcast Engineering
 Paradise Valley, Arizona
ENGINEERING EXHIBIT E-1
 Distance & Bearing Calculations

Page 1
 April 28, 1993

Job title : CIRCLE 5 BROADCASTING / KMED(FM) 33

Site No.	Latitude Longitude	Distance (miles)	Distance (kilometers)	Bearing From Site 1 and Reciprocal (degrees true)
----------	-----------------------	---------------------	--------------------------	--

Site 1 coordinates

? 33, 51.31, 112, 53.04

1 33-51-31.0
 112-53-04.0

Site 2 coordinates

? 33, 58.00, 112, 43.48

2	33-58-00.0	BC=	11.58	18.64	49.82
	112-43-48.0	FDC=	11.59	18.65	229.91

Site 3 coordinates

?

INT

==>

Klein Broadcast Engineering
Paradise Valley, Arizona

Page 1
April 29, 1993

ENGINEERING EXHIBIT E-2
Terrain Averages from NGDC 30-second Topographic database

Job Title: CIRCLE 8 BROADCASTING / KMED(FM)
Center of Radiation 1042.0 m (3418.6 ft) A.M.S.L.

Latitude: 33-51-31
Longitude: 112-53-04

Bearing (Degrees true)	3.0 to 16.0 kilometer average terrain elevation		Height above average terrain	
	(meters)	(feet)	(meters)	(feet)
.0	829.6	2721.8	212.4	696.9
45.0	820.5	2691.9	221.5	726.7
* 49.8	816.4	2678.5	225.6	740.2
90.0	718.0	2355.6	324.0	1063.0
135.0	599.2	1965.9	442.8	1452.8
180.0	585.3	1920.3	456.7	1498.4
225.0	648.9	2128.9	393.1	1289.7
270.0	773.4	2537.4	268.6	881.2
315.0	828.8	2719.2	213.2	699.5
Average:	725.5	2380.2	316.5	1038.4
* = Radial not included in average				
Average (36) radials:	726.1	2382.2	315.9	1036.4
Average (72) radials:	726.1	2382.2	315.9	1036.4



Klein Broadcast Engineering
Paradise Valley, Arizona

Page 1
April 29, 1993

ENGINEERING EXHIBIT E-5

DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-0001

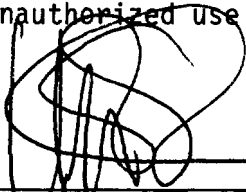
 U.S. Department of Transportation Federal Aviation Administration			NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION		Aeronautical Study Number
1. Nature of Proposal A. Type <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration B. Class <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration _____ months) C. Work Schedule Dates Beginning <u>Upon FCC grant</u> End <u>90 days after</u>			2. Complete Description of Structure A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure. B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports. C. Include information showing site orientation, dimensions and construction materials of the proposed structure. Applicant proposes operation of FM Broadcast Station KMEO(FM) on FM Channel 231 class C3, 94.1MHz with 2.5 kilowatts ERP. The proposed FM antenna radiation center to be 837 feet AGL & 3419 feet AMSL. The overall height of the antenna support tower is 843 feet AGL and 3426 feet AMSL. (If more space is required, continue on a separate sheet.)		
3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code) (602) 254-6644 area code Telephone Number TO Mr. Harold R. Shumway, President Circle S Broadcasting Company, Inc. Radio Station K M E O (FM) 801 West Wickenburg Way Wickenburg, AZ 85358			3B. Name, address and telephone number of proponent's representative if different than 3 above. Elliott Kurt Klein, Conslt. B'cast. Engr. Klein Broadcast Engineering 5529 East Sapphire Lane Paradise Valley, AZ 85253 (602) 991-0575		
4. Location of Structure A. Coordinates (To nearest second) NAD-27 33° 51' 31" Latitude 112° 53' 04" Longitude B. Nearest City, Town and State Wickenburg, AZ (1) Distance to 4B 11.59 Miles (2) Direction to 4B 49.8° T. C. Name of nearest airport, heliport, flightpark, or seaplane base Forepaugh AP (1) Distance from structure to nearest point of nearest runway 8.49 miles (2) Direction from structure to airport 318.1° T.			5. Height and Elevation (Complete to the nearest foot) A. Elevation of site above mean sea level 2583 B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated 843 C. Overall height above mean sea level (A + B) 3426		
D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (If more space is required, continue on a separate sheet of paper and attach to this notice.) 11.59 miles southwest of Wickenburg, Maricopa County, Arizona, on a bearing of 229.91° T., from Wickenburg, Maricopa County, Arizona.					
Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).					
I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.					
Date April 30, 1993		Typed Name/Title of Person Filing Notice Elliott Kurt Klein, Conslt. B'cast. Engr.		Signature 	
FOR FAA USE ONLY: The Proposal: <input type="checkbox"/> Does not require a Notice to Aeronautics (NTA) <input type="checkbox"/> Is not considered an obstruction under Part 77					

KLEIN BROADCAST ENGINEERING

STATE of ARIZONA)
CITY of SCOTTSDALE) ss:
COUNTY of MARICOPA)

dedicated to improving the science and technology of radio & television communications

Elliott Kurt Klein, being duly sworn states, that he is a consulting broadcast engineer with offices located at 5529 East Sapphire Lane, Paradise Valley, Arizona 85253. That he has been employed in the broadcast engineering profession since 1967, and that he has prepared many different reports and applications and presented them before the Federal Communications Commission, over the past twenty-six years. That his engineering qualifications are a matter of record with the Federal Communications Commission. That he has held a valid First Class Radiotelephone Operators License since 1967. That his present license number is PG-11-21248, valid for life. That he is a member in good standing of The Society of Broadcast Engineers since 1969 (SBE). That he is a member in good standing of the Institute of Electrical and Electronic Engineers (IEEE). That the calculations and or measurements and exhibits in the accompanying report or application were made by him personally or under his supervision and direction, and that all facts contained herein are true of his own personal knowledge and belief, and on such facts or statements made on belief, they are believed to be true. He assumes no liability for any errors or omissions and shall not be liable for injuries and/or damages (including consequential) which might result from use of said information. All pages, engineering exhibits, and statements are covered under the copyright laws of the United States of America and remain the property of the client and Klein Broadcast Engineering. Any unauthorized use or reproduction is prohibited by law.



Affiant: Elliott Kurt Klein for the firm:

KLEIN BROADCAST ENGINEERING

Subscribed and sworn to before me,

this 30th day of April 1993

Sara J. Briggs Nov. 23, 1994
Notary Public Date of Commission Expiration:



